

Message

From: Sengco, Mario [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=4138218D625A4B6ABCD6C519817A6917-SENGCO, MARIO]
Sent: 5/12/2020 3:23:07 PM
To: Wilcut, Lars [Wilcut.Lars@epa.gov]; Fleisig, Erica [Fleisig.Erica@epa.gov]
Subject: RE: Question from ND re: Ammonia Standard

Thanks, Lars. I'll forward to Holly.

Mario

From: Wilcut, Lars <Wilcut.Lars@epa.gov>
Sent: Tuesday, May 12, 2020 10:58 AM
To: Fleisig, Erica <Fleisig.Erica@epa.gov>
Cc: Sengco, Mario <Sengco.Mario@epa.gov>
Subject: RE: Question from ND re: Ammonia Standard

The equations themselves look right. A couple points to pass on to Holly:

- The criteria are expressed as mg of total ammonia nitrogen/L (TAN/L), not N/L
- The key vertebrate in the 2013 criteria is *Oncorhynchus*, not salmonids in general. The other salmonids in the criteria database are surrogates for other fish species that are likely to be present in fresh waters. If there aren't rainbow trout in North Dakota, the state could use the recalculation procedure to remove them. Has the state done that before for any other criteria?

We stand ready to support North Dakota and Region 8 in their effort to revise ammonia criteria!

Lars

From: Fleisig, Erica <Fleisig.Erica@epa.gov>
Sent: Monday, May 11, 2020 10:46 AM
To: Wilcut, Lars <Wilcut.Lars@epa.gov>
Cc: Sengco, Mario <Sengco.Mario@epa.gov>
Subject: FW: Question from ND re: Ammonia Standard

Lars is actually our ammonia guy, and he doesn't have a staff person yet (not Karen, she might murder me if I try to give her something else to work on 😊) He can give us some answers on this – can you also check with Holly re: what Pete means re: the red river (would the old ammonia criteria apply?) We have a recent situation in NV where the state is proposing to adopt our selenium 304a but with a 3-year delayed effective date just for one particular water where they want to have enough time to develop a site-specific criterion. Would that maybe work here in ND?

From: Sengco, Mario <Sengco.Mario@epa.gov>
Sent: Monday, May 11, 2020 9:46 AM
To: Fleisig, Erica <Fleisig.Erica@epa.gov>
Subject: FW: Question from ND re: Ammonia Standard

Please see the following and attachment. Frankly, I'm surprised that ND is moving forward with ammonia. Could we get a read on the attached? I think it's safe to say a hippo-free criterion would be allowable in ND.

Mario

From: Wirick, Holiday <wirick.holiday@epa.gov>
Sent: Friday, May 08, 2020 2:08 PM
To: Sengco, Mario <Sengco.Mario@epa.gov>
Subject: Question from ND re: Ammonia Standard

Hi Mario I hope all is well.

Pete Wax from North Dakota Dept. of Environmental Quality is working on the state's next triennial and is exploring options for adopting EPA's 2013 ammonia criteria.

It sounds promising. Apparently, mussels have been found all over the state and it seems the permitting folks are on board with Pete's plans to move ahead, and the next step is working to convince management.

Pete has a question about the attached revised equations (in blue). He asked if the tables assume that all waters in the state have mussels, does he need the "salmonids present" equation, or any additional equations based on pH of 7 and lower temperatures?

Pete said in previous correspondence that there's a better chance of finding a hippopotamus in ND's waters than salmonids.

Pete also asked me to review the revised equations to make sure they're properly populated.

Since this is my first rodeo with ammonia criteria, do you think I should get in touch with Karen Kessler about Pete's question and revised equations?

Thanks - and have a fun, productive, and musical weekend.

Holly Wirick
Water Quality Section
U.S. EPA - Region 8
303-312-6238

From: Wax, Peter N. <pwax@nd.gov>
Sent: Friday, May 8, 2020 7:56 AM
To: Wirick, Holiday <wirick.holiday@epa.gov>
Subject: Ammonia Standard

Dear Holly:

Hope spring has sprung in Colorado and you are healthy and covid free. I am working from home.

STANDARDS: Working on Table 2 in ND's standards and I am a bit unsure of the proper equations for Ammonia. If I use the two included and assume all waters have mussels, do I need the salmonids present one and any additional equations based on pH of 7 and lower temperatures. If so, could you help me ensure that this table is populated correctly.

The table 2 with Blue is new the table 2 with Red is old. When I am sure of the equations, I will rewrite them larger in a different program but for now I just need to know they are correct as intended and inclusive.

Note that in the new table there is no site-specific criteria for Fargo on the Red River. With some upgrades they can make the new criteria. Upgrading will be expensive. Fargo is the largest and most politically powerful community in

ND. While I hope not, there is a possibility that a new "site-specific criteria" will need to be calculated. At that point I will be leaning on for additional help.

Note, my work number (701-328-5268) rings at my home. Leave a message if I do not pick up - running to the office and back can take a couple hours and I will make a few trips a week.

Sincerely,

Pete

Peter N. Wax
Special Projects
Division of Water Quality

701.328.5268 • pwax@nd.gov • <https://deq.nd.gov/>

